

Figure 1

	← write areas (wa = 1) →												← spare bit →				
bit positions i:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
old data d_i :	1	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0	
coded data b_i :	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	
reads:	R	-	-	-	-	R	-	R	R	-	R	R	-	R	R	-	
writes:	-	W	W	W	W	-	W	-	-	W	-	-	W	-	-	W	W

write results

i = 1:	0	1	0	0	0	1	0	0	0	1	0	1	0	0	1	0
i = 2:	0	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0
i = 3:	0	0	0	1	0	1	0	0	0	1	0	1	0	0	1	0
i = 4:	0	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0
i = 6:	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0
i = 9:	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0
i = 12:	0	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0
i = 15:	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	1
i = 16:	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0

Figure 3

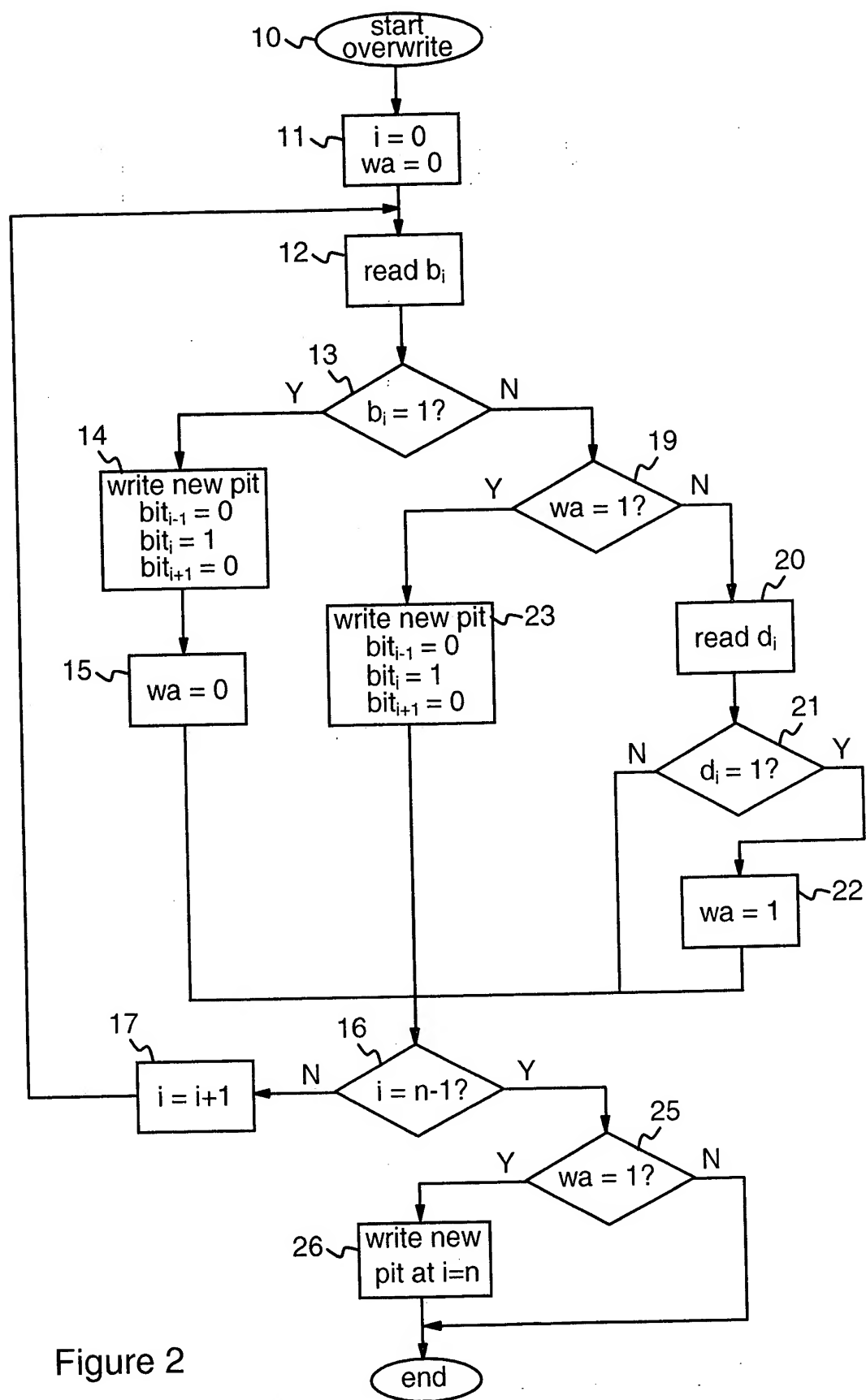


Figure 2

↔ write areas (wa = 1) spare bit ↓

bit positions i:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
old data d_i :	1	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0	
coded data b_i :	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	
reads:	R	-	-	-	-	-	-	-	R	-	-	R	-	-	R	-	
writes:	-	W	W	W	W	-	W	-	-	W	-	-	W	-	-	W	W

Figure 4

↔ write areas (wa = 1) spare bit ↓

bit positions i:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
old data d_i :	1	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0	
coded data b_i :	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	
reads:	R	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	
writes:	-	W	W	W	W	-	W	-	-	W	-	-	W	-	-	W	W

Figure 6

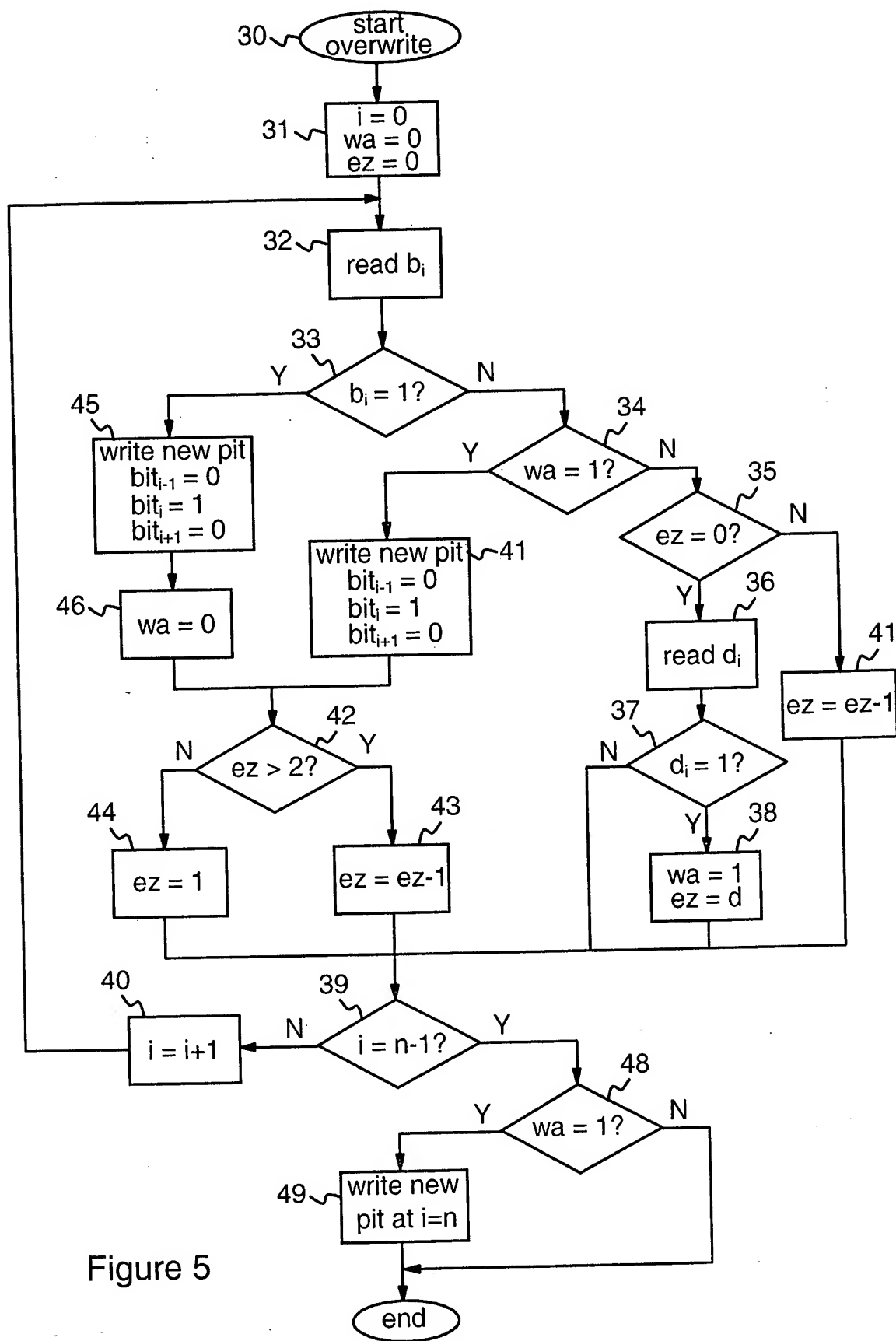


Figure 5

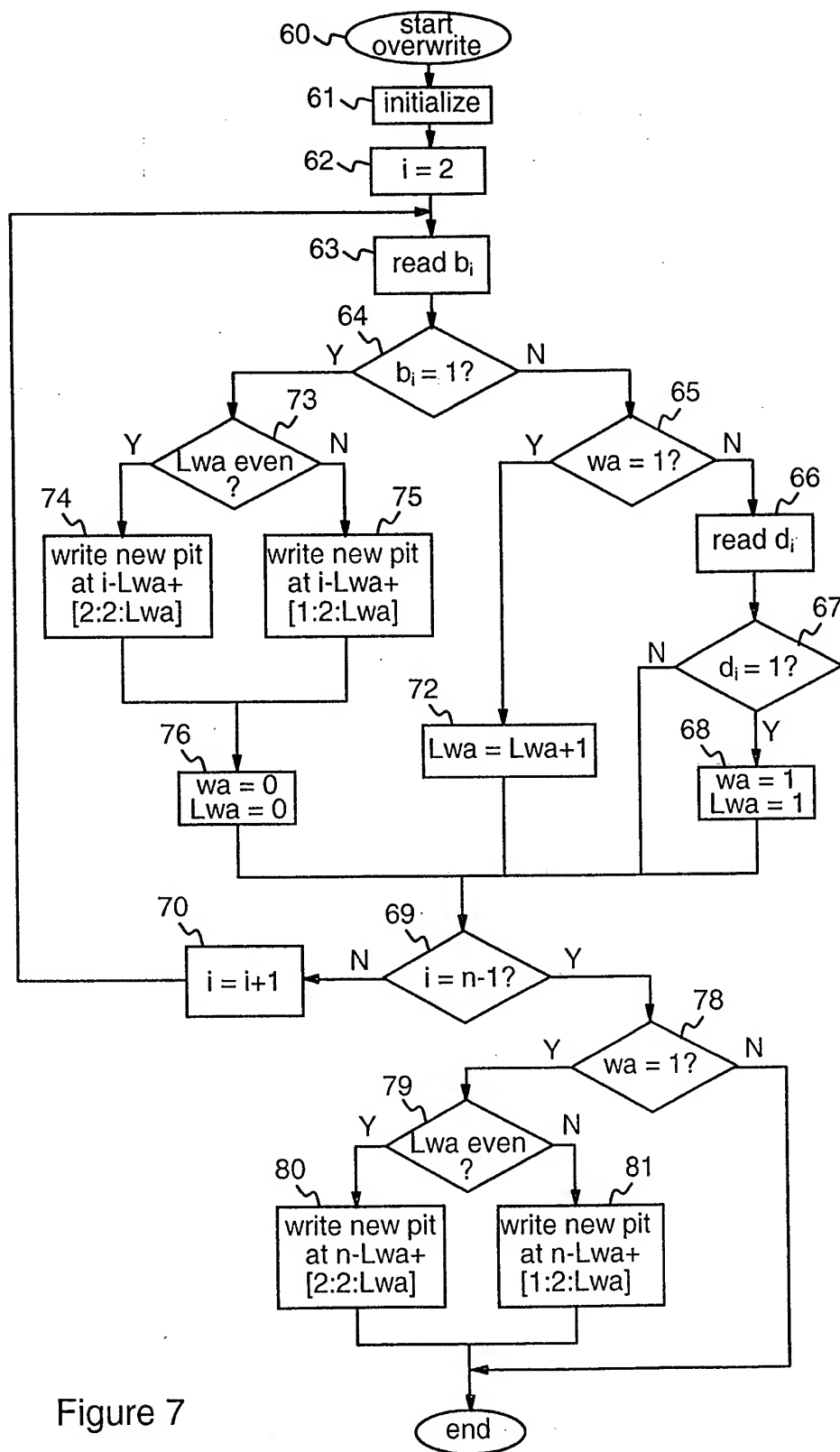


Figure 7

← write areas (wa = 1) →

spare bit
↓

bit positions i:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
old data d _i :	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	
coded data b _i :	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	
reads:	R	-	-	-	-	-	R	R	R	-	R	R	-	R	R	R	
writes:	-	W	-	W	-	W	-	-	-	W	-	-	W	-	-	-	W

write results

i = 1: 0 1 0 0 0 0 0 0 1 0 0 0 1 0 0 1

i = 3: 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 1

i = 5: 0 0 0 0 0 1 0 0 1 0 0 0 1 0 0 1

i = 9: 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 1

i = 12: 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 1

i = 16: 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1

Figure 8

← write areas (wa = 1) →

spare bit
↓

bit positions i:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
old data d _i :	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	1	
coded data b _i :	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	
reads:	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R
writes:	-	W	-	W	-	W	-	-	-	W	-	-	W	-	-	-	W

Figure 10

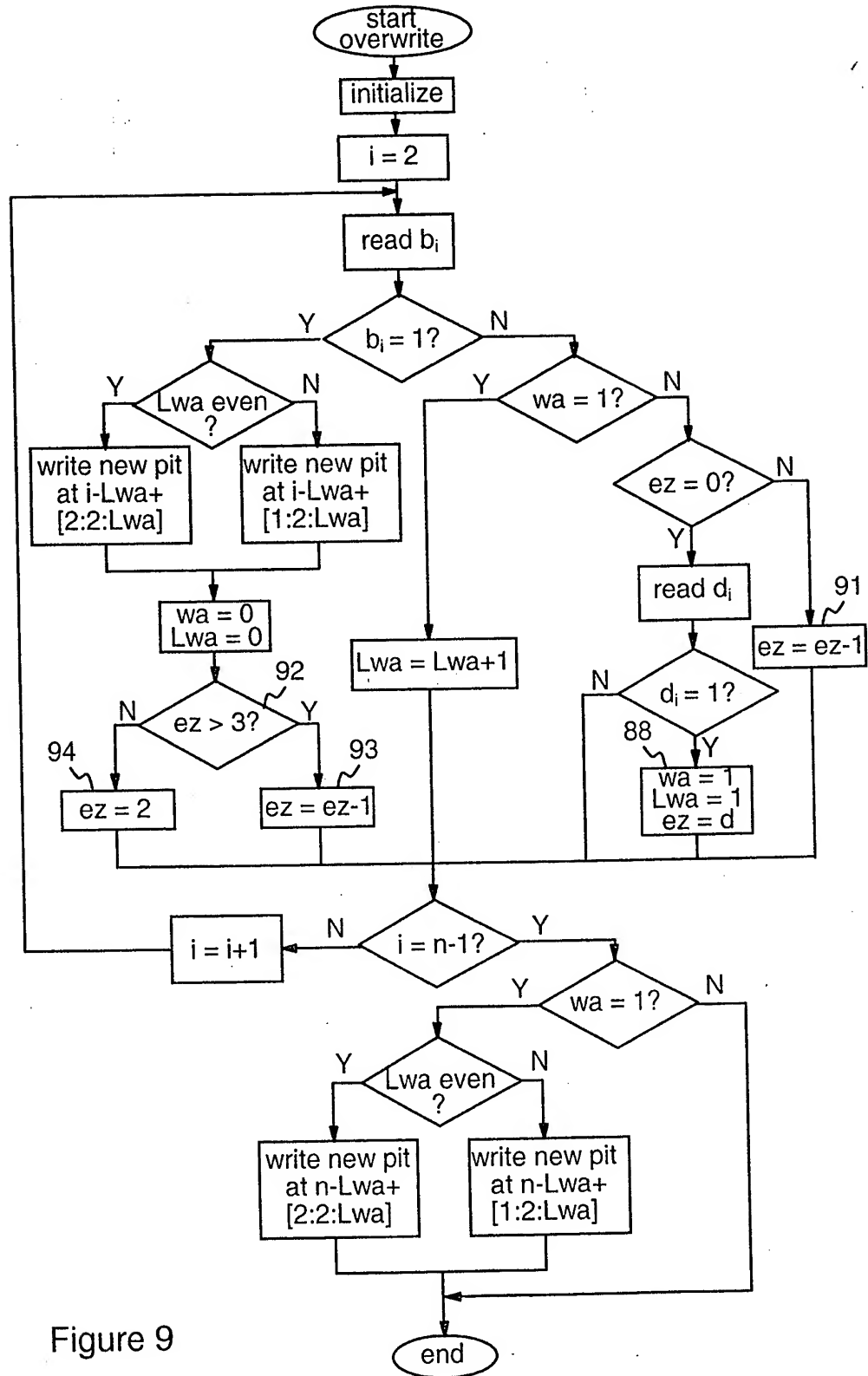


Figure 9

Code:	(1, 3)	(2, 10) code 1	(2, 10) code 2
N_w	0.41	0.38	0.37
N_r	0.22	0.42	0.41
N_{method2}	0.44	0.61	0.57
N_{code}	0.37	0.2	0.22

Figure 11

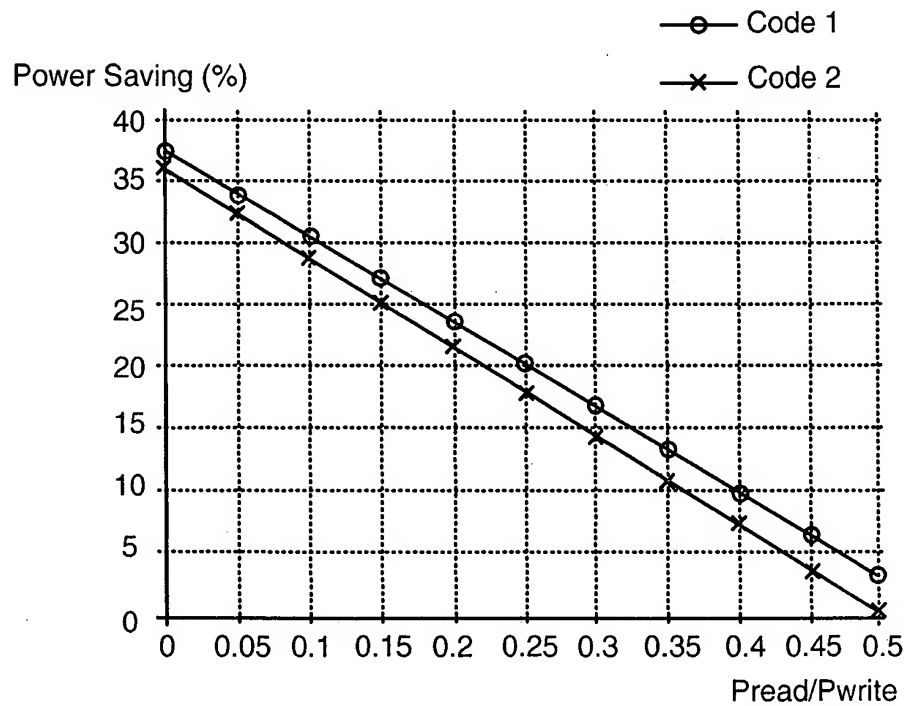


Figure 12

Code:	(2, 10) code 1	(2, 10) code 2
N_{w2}	0.24	0.25
N_{r2}	0.29	0.26
$N_{method3}$	0.3	0.29
N_{code}	0.2	0.22

Figure 13

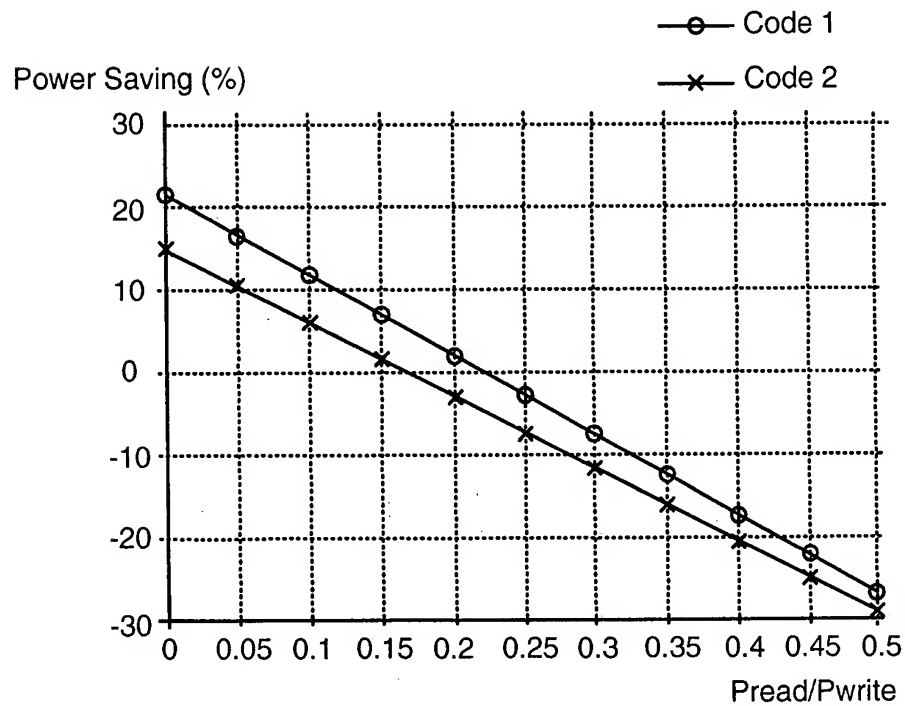


Figure 14